

REMARKS

In the Final Office Action mailed January 29, 2003, the Examiner has maintained the rejection of Claims 33-35, 38-55, and 58-62 under 35 U.S.C. 102(b) or under 35 U.S.C. 103(a) in view of the Hirshstein reference (U.S. Patent No. 2,284,737). The Examiner also maintained the rejection of Claims 40-55 and 58-59 under 35 U.S.C. 102(b) or under 35 U.S.C. 103(a) in view of the Pravicha et al. reference (U.S. Patent No. 745,519). By this amendment, the Applicant has amended some of the rejected claims, as shown herein, and submits the following argument. In particular, independent Claims 33, 40, 42, 52, and 53 have been amended to include limitations associated with an output flow retarding member and an active lag capacity of the separator which results from such flow retarding means. Some of the dependent claims have been amended in accordance with the amended independent claims.

Rejection under 35 U.S.C. § 102(b) or § 103(a) in view of Hirshstein

As seen in Figures 1, 5, 6, and 7 of the Hirshstein reference, the disclosed device has a complex multi-baffle assembly (41, 43, 44, 45, 47) that is equivalent to the first underflow baffle. The baffle 51 is equivalent of the second underflow baffle in the conventional "API"-type separator structure (prior art). The "second" baffle (51) appears to have incorporated into it an overflow pipe for venting gas. Otherwise, the baffle (51) functions as an underflow baffle of the conventional API-type separator. The zone denoted as "Q" in Figure 1 of the Hirshstein reference is defined between the first and second baffles. The Applicant notes that the primary level or steady state liquid flow level in the Hirshstein device is, as in the API-type devices, along a generally horizontal line defined between the lower portions of the input and output tubes (16 and 17 in Figure 5).

The Examiner has noted that the liquid level in the "Q" zone does vary. The Applicant notes, however, that such a level varies only as a result of either the input flow rate (or lack thereof), or as a result of the weight of the fat (or equivalent separated material) pressing down on the liquid (illustrated in Figures 5-7). In the Hirshstein device, the level change is not caused by the action of the output portion of the device.

In contrast, the Applicant's device as claimed comprises an outflow control mechanism that controls the output rate of the device depending on the separator chamber's liquid level. In one possible embodiment, the output flow control comprises means for retarding outflow that is

controlled by means sensitive to the high and low liquid levels of the separation chamber. Such a feature is not disclosed, taught, contemplated, or suggested in the Hirshstein reference. Thus, the Applicant respectfully submits that Claims 33-35, 38-55, and 59-61 (58 and 62 cancelled) are patentably distinguished from the Hirshstein reference.

Rejection under 35 U.S.C. § 102(b) or § 103(a) in view of Pravicha

In reference to Figure 1 of Pravicha reference, separation is performed in the tank labeled 8 in a manner analogous to the API-type separator. There is no substantive oscillation in the level of oil and water mixture in the tank. The oil and water mixture simply sits in the tank with oil on the surface being decanted as more oil and water mixture is poured in.

The overflow-pipe denoted as "9" (referred to as a siphon by the Examiner) in Figure 1 of the Pravicha reference, to function in a manner similar to the Applicant's device so as to provide an "active lag capacity," would require a direct liquid connection between the tank 8 and the compartment (7 in Figure 1) from which the pipe 9 draws its water from. Such direct connection between the two compartments is simply not present in the Pravicha device of Figure 1, and therefore does not provide the active lag capacity as recited in the amended claims.

In reference to Figure 4 of the Pravicha reference, the left hand portion of the composite tank generally defines an API-type structure with no control over the outflow. Thus, there is no "active lag capacity" here as well. For active lag capacity to exist between the two underflow baffles shown in Figure 4, outflow control something other than mere decanting needs to be present. No such outflow control exists in the device of Figure 4.

The Pravicha reference does not disclose, teach, contemplate, or suggest any concept that combines the features of a controlled output that facilitates an active lag capacity in a separation chamber. Thus, the Applicant respectfully submits that Claims 40-55 and 58-59 in the amended form are patentably distinguished from the Pravicha reference.

SUMMARY

For the foregoing reasons, the Applicant submits that the amended claims of the pending application are allowable. Should there be any impediment to the prompt allowance of this application that could be resolved by a telephone conference, the Examiner is respectfully requested to call the undersigned at the number shown.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Dated: _____

4/28/03

Respectfully submitted,

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